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Table 1: Normalised major element analyses (wt. %) for volcanic glass.

Sample number	Distance (µm)	SiO ₂	TiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	Total
ACAF24 TRANSECT 2	0.00	68.07	0.51	12.55	4.72	0.20	0.08	1.22	7.59	5.03	0.02	100.00
	59.99	71.57	0.18	12.62	3.05	0.14	0.08	0.50	6.26	5.59	0.01	100.00
	79.99	71.99	0.17	12.67	3.00	0.13	0.02	0.36	5.81	5.84	0.01	100.00
	99.99	72.02	0.18	12.65	3.00	0.12	0.03	0.34	5.82	5.83	0.01	100.00
	119.99	72.47	0.18	12.69	2.89	0.10	0.03	0.27	5.61	5.75	0.00	100.00
	139.98	72.64	0.18	12.65	2.82	0.13	0.02	0.23	5.60	5.71	0.02	100.00
	159.98	72.52	0.18	12.61	2.89	0.11	0.03	0.21	5.58	5.87	0.01	100.00
	179.98	72.39	0.18	12.74	2.90	0.13	0.02	0.17	5.41	6.05	0.01	100.00
	199.98	72.61	0.18	12.75	2.79	0.14	0.01	0.22	5.52	5.78	0.01	100.00
	219.98	72.66	0.19	12.86	2.77	0.13	0.05	0.24	5.40	5.70	0.00	100.00
	239.97	72.85	0.18	12.45	3.05	0.13	0.02	0.27	5.45	5.60	0.00	100.00
	259.97	72.48	0.18	13.05	2.74	0.13	0.01	0.29	5.44	5.66	0.03	100.00
	279.97	72.71	0.17	12.75	3.08	0.13	0.04	0.27	5.22	5.63	0.01	100.00
	299.97	72.84	0.17	12.63	3.02	0.14	0.01	0.28	5.26	5.63	0.00	100.00
	319.96	72.24	0.18	12.75	3.22	0.13	0.04	0.37	5.34	5.70	0.03	100.00
	339.96	72.36	0.18	12.78	3.21	0.12	0.02	0.36	5.42	5.52	0.04	100.00
	359.96	72.29	0.18	12.83	3.07	0.13	0.04	0.31	5.40	5.75	0.00	100.00
	379.96	72.42	0.18	12.82	3.09	0.14	0.00	0.29	5.39	5.68	0.01	100.00
	399.95	72.53	0.18	12.53	3.11	0.14	0.04	0.34	5.50	5.62	0.00	100.00
	419.95	72.25	0.19	12.77	3.33	0.14	0.03	0.37	5.29	5.64	0.00	100.00
	439.95	72.54	0.18	12.21	3.33	0.14	0.06	0.32	5.38	5.82	0.01	100.00
	459.95	72.32	0.18	12.74	3.33	0.14	0.02	0.24	5.28	5.73	0.01	100.00
	479.95	72.35	0.17	12.79	3.20	0.14	0.02	0.32	5.49	5.50	0.01	100.00
	499.94	72.22	0.18	12.94	2.94	0.14	0.04	0.32	5.41	5.79	0.02	100.00
	519.94	72.30	0.17	12.77	2.99	0.15	0.03	0.33	5.56	5.69	0.01	100.00
	539.94	72.31	0.18	12.92	3.12	0.14	0.03	0.35	5.35	5.61	0.00	100.00
	559.94	72.42	0.18	12.71	3.34	0.14	0.02	0.33	5.28	5.58	0.01	100.00
	579.94	72.70	0.18	12.73	2.93	0.14	0.02	0.36	5.30	5.63	0.00	100.00
	599.93	72.44	0.17	12.78	3.11	0.14	0.04	0.38	5.38	5.57	0.00	100.00

Table 1: continued

Sample number	Distance (μm)	SiO ₂	TiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	Total
ACAF24 TRANSECT 2	619.93	72.70	0.18	12.51	2.99	0.14	0.02	0.36	5.31	5.79	0.00	100.00
	639.93	72.31	0.17	12.91	2.96	0.15	0.03	0.34	5.33	5.77	0.01	100.00
	659.93	72.51	0.18	12.62	3.03	0.15	0.04	0.41	5.46	5.61	0.01	100.00
	679.92	73.08	0.17	12.36	2.95	0.14	0.01	0.36	5.34	5.58	0.01	100.00
	699.92	72.89	0.18	12.65	2.88	0.15	0.02	0.40	5.29	5.56	0.00	100.00
ACAF24 TRANSECT (Scoria edge to rhyolitic glass)	0.00	71.46	0.34	12.19	4.24	0.13	0.05	0.36	5.82	5.34	0.07	100.00
	20.01	72.13	0.20	12.69	3.41	0.13	0.04	0.33	5.42	5.65	0.01	100.00
	40.01	72.74	0.18	12.61	2.89	0.14	0.04	0.32	5.34	5.72	0.00	100.00
	60.02	72.66	0.17	12.68	2.91	0.15	0.03	0.37	5.37	5.65	0.01	100.00
	80.02	72.54	0.17	12.80	2.92	0.14	0.04	0.33	5.50	5.54	0.01	100.00
	100.03	72.29	0.18	12.89	2.97	0.15	0.02	0.38	5.38	5.73	0.00	100.00
	120.03	72.53	0.18	12.81	2.97	0.13	0.02	0.37	5.38	5.60	0.02	100.00
	140.04	73.17	0.17	12.37	2.89	0.12	0.07	0.30	5.42	5.48	0.00	100.00
	160.05	72.84	0.18	12.50	3.11	0.16	0.04	0.31	5.38	5.48	0.01	100.00
	200.06	72.81	0.17	12.70	2.95	0.17	0.05	0.37	5.24	5.53	0.02	100.00
	220.06	72.68	0.18	12.64	3.08	0.15	0.05	0.33	5.24	5.64	0.01	100.00
	240.07	72.41	0.17	12.72	3.06	0.14	0.03	0.33	5.43	5.72	0.00	100.00
	260.07	72.49	0.17	12.76	3.09	0.14	0.02	0.31	5.25	5.75	0.01	100.00
	280.08	72.85	0.17	12.82	3.06	0.13	0.02	0.31	5.26	5.37	0.01	100.00
ACAF32_3 TRANSECT 3	0.00	72.98	0.17	12.70	3.02	0.14	0.02	0.31	5.68	4.97	0.01	100.00
	50.01	72.94	0.23	12.52	3.11	0.15	0.01	0.38	5.84	4.82	0.01	100.00
	200.06	72.88	0.18	12.59	3.01	0.14	0.04	0.37	5.86	4.93	0.00	100.00
	250.07	72.61	0.18	12.56	3.20	0.15	0.03	0.35	5.92	4.99	0.01	100.00
	300.09	72.95	0.17	12.79	3.29	0.14	0.03	0.36	5.51	4.73	0.01	100.00
ACAF32_3 TRANSECT 1	0.00	72.46	0.17	13.17	2.93	0.14	0.04	0.34	5.87	4.89	0.00	100.00
	100.00	72.30	0.18	12.93	3.10	0.13	0.06	0.33	5.89	5.09	0.00	100.00
	800.01	72.65	0.17	12.87	3.12	0.14	0.04	0.34	5.77	4.90	0.00	100.00
	900.01	72.84	0.18	12.77	2.98	0.13	0.05	0.34	5.81	4.92	0.00	100.00
ACAF32_3 TRANSECT (Phenocryst to bubble)	0.00	72.82	0.17	12.91	3.02	0.13	0.02	0.37	5.87	4.66	0.01	100.00
	50.04	72.84	0.17	13.11	2.95	0.14	0.02	0.39	5.59	4.78	0.01	100.00
	100.07	74.07	0.17	12.11	2.81	0.13	0.04	0.33	5.64	4.70	0.01	100.00

Table 1: continued

Sample number	Distance (μm)	SiO ₂	TiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	Total
ACAF32_3 TRANSECT (Phenocryst to bubble)	150.11	73.09	0.17	12.89	2.88	0.14	0.00	0.35	5.80	4.67	0.00	100.00
	200.14	73.04	0.17	12.79	2.98	0.15	0.02	0.38	5.74	4.74	0.00	100.00
	250.18	73.03	0.17	12.52	2.98	0.14	0.04	0.39	5.90	4.80	0.01	100.00
	300.21	72.92	0.17	12.78	3.02	0.16	0.02	0.34	5.94	4.65	0.01	100.00
	350.25	72.72	0.17	12.94	3.02	0.14	0.04	0.34	5.88	4.76	-0.01	100.00
	400.29	73.16	0.19	12.68	2.94	0.15	0.04	0.36	5.57	4.91	0.01	100.00
ACAF36B TRAVERSE 1	20.04	68.86	0.23	15.22	3.10	0.09	0.09	0.24	8.09	4.08	0.02	100.00
	40.05	72.08	0.19	12.59	3.45	0.14	0.07	0.21	5.85	5.42	0.01	100.00
	60.07	72.98	0.17	12.48	2.88	0.13	0.06	0.19	5.58	5.52	0.01	100.00
	80.08	73.06	0.17	12.32	3.04	0.15	0.06	0.26	5.49	5.46	0.00	100.00
	100.10	73.18	0.18	12.39	2.81	0.14	0.03	0.24	5.62	5.40	0.01	100.00
	120.12	72.72	0.17	13.04	2.55	0.13	0.05	0.26	6.21	4.88	0.00	100.00
	140.14	72.83	0.17	12.48	3.31	0.14	0.03	0.29	5.61	5.14	0.00	100.00
	160.16	72.83	0.18	12.27	3.14	0.15	0.10	0.31	5.67	5.36	0.01	100.00
	180.17	73.09	0.26	11.80	3.67	0.18	0.09	0.32	5.53	5.04	0.01	100.00
	200.19	72.90	0.22	11.88	3.75	0.16	0.08	0.31	5.60	5.09	0.01	100.00
	220.21	72.92	0.19	12.51	3.07	0.15	0.04	0.26	5.61	5.24	0.01	100.00
	240.23	72.79	0.18	12.94	2.87	0.14	0.05	0.30	5.49	5.23	0.01	100.00
	260.25	71.95	0.17	13.43	2.87	0.15	0.06	0.32	6.04	5.01	0.01	100.00
	280.27	73.24	0.18	12.38	2.84	0.13	0.04	0.35	5.49	5.35	0.00	100.00
	300.29	72.83	0.17	12.76	2.94	0.12	0.04	0.34	5.44	5.34	0.01	100.00
	320.31	72.74	0.18	13.01	2.79	0.13	0.05	0.36	5.57	5.15	0.01	100.00
	340.33	73.02	0.17	12.46	2.96	0.14	0.05	0.32	5.66	5.22	0.00	100.00
ACAF36B TRAVERSE 2	0.00	55.73	2.28	14.44	7.54	0.19	2.79	7.75	6.31	1.64	1.33	100.00
	19.98	55.96	1.97	16.96	8.15	0.12	1.69	5.24	7.26	1.70	0.94	100.00
	59.94	57.47	1.20	7.90	10.04	0.58	5.24	9.56	5.34	2.13	0.54	100.00
	99.90	72.96	0.18	12.24	3.01	0.12	0.08	0.28	5.71	5.42	0.00	100.00
	139.86	73.00	0.18	12.75	2.65	0.13	0.08	0.31	5.64	5.26	0.00	100.00
	159.84	73.09	0.18	12.58	2.98	0.13	0.04	0.34	5.44	5.21	0.00	100.00
	179.81	72.73	0.18	12.87	3.07	0.14	0.05	0.35	5.46	5.15	0.00	100.00

Table 1: continued

Sample number	Distance (μm)	SiO ₂	TiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	Total
ACAF36B TRAVERSE 2	199.79	72.76	0.19	12.42	3.06	0.15	0.05	0.37	5.72	5.26	0.01	100.00
	239.75	72.52	0.17	12.94	3.02	0.14	0.05	0.36	5.68	5.10	0.01	100.00
	259.73	73.29	0.17	12.44	2.95	0.14	0.03	0.35	5.55	5.08	0.00	100.00
	279.71	72.90	0.17	12.81	2.94	0.15	0.05	0.33	5.45	5.20	0.00	100.00
	299.69	72.91	0.18	12.95	2.74	0.14	0.06	0.34	5.47	5.22	0.00	100.00
	319.67	72.89	0.17	12.55	2.96	0.14	0.06	0.33	5.54	5.35	0.01	100.00
	339.65	72.85	0.18	12.51	3.15	0.14	0.04	0.32	5.61	5.20	0.01	100.00
	379.61	73.04	0.17	12.53	3.02	0.13	0.07	0.37	5.59	5.08	0.00	100.00
	399.59	72.51	0.18	12.65	2.98	0.13	0.04	0.39	5.79	5.33	0.00	100.00
	419.57	73.08	0.17	12.60	2.79	0.13	0.06	0.32	5.67	5.18	0.00	100.00
	439.55	72.77	0.17	12.72	3.15	0.14	0.06	0.34	5.55	5.10	0.00	100.00
	459.53	73.08	0.17	12.50	3.06	0.14	0.03	0.31	5.46	5.24	0.00	100.00
ACAFB TRAVERSE 1	0.00	58.85	2.71	16.09	6.04	0.23	2.46	4.20	6.71	1.54	1.17	100.00
	39.90	57.03	0.25	25.41	1.25	0.02	0.32	8.55	6.58	0.48	0.13	100.00
	59.84	57.43	0.64	21.95	4.43	0.10	0.29	6.66	7.20	0.73	0.58	100.00
	79.79	72.72	0.24	13.12	2.55	0.08	0.20	0.40	5.48	5.17	0.04	100.00
	99.73	73.03	0.17	12.49	2.89	0.12	0.26	0.47	5.36	5.22	-0.01	100.00
ACAFB TRAVERSE 2	0.00	57.00	2.87	15.80	8.49	0.22	1.75	4.08	7.35	1.27	1.18	100.00
	20.02	56.81	1.14	17.41	8.25	0.18	2.52	4.01	7.68	1.13	0.88	100.00
	59.99	65.43	0.25	12.49	3.74	0.26	3.07	4.45	5.79	4.41	0.10	100.00
	79.99	72.60	0.23	12.26	3.32	0.11	0.34	0.36	5.78	4.98	0.01	100.00
	99.98	72.63	0.17	12.75	2.98	0.13	0.32	0.37	5.62	5.04	0.01	100.00
	119.98	73.37	0.17	12.73	2.64	0.11	0.28	0.29	5.45	4.95	0.02	100.00
	139.97	73.05	0.17	12.44	2.70	0.11	0.22	0.32	5.80	5.18	0.01	100.00
	179.96	72.73	0.17	13.06	2.61	0.12	0.14	0.31	5.77	5.09	0.00	100.00
	199.96	73.55	0.17	12.67	2.60	0.12	0.14	0.27	5.72	4.76	0.00	100.00
	219.95	73.44	0.17	12.51	2.68	0.12	0.09	0.37	5.72	4.89	0.01	100.00
	239.95	73.07	0.17	12.66	2.79	0.11	0.08	0.33	5.75	5.02	0.01	100.00

Table 2: Normalised major element analyses (wt. %) for volcanic glass.

Sample number	SiO ₂	TiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	Total
ACAF32_1	73.10	0.17	12.80	2.79	0.13	0.05	0.35	5.93	4.66	0.01	100.00
	72.41	0.17	13.44	2.86	0.11	0.02	0.26	6.83	3.89	0.00	100.00
	73.09	0.17	12.62	3.05	0.13	0.03	0.31	5.87	4.72	0.00	100.00
	73.12	0.16	12.65	2.98	0.15	0.01	0.36	5.76	4.79	0.01	100.00
	73.19	0.16	12.73	3.04	0.13	0.03	0.28	5.81	4.62	0.01	100.00
	73.16	0.17	12.72	2.90	0.13	0.05	0.36	5.79	4.71	0.01	100.00
	72.97	0.17	12.67	3.03	0.15	0.01	0.32	5.82	4.85	0.01	100.00
	72.63	0.18	13.03	3.08	0.14	0.04	0.34	5.85	4.72	0.00	100.00
	73.00	0.18	12.55	3.00	0.13	0.05	0.38	5.83	4.88	0.00	100.00
ACAF37	72.09	0.18	13.09	3.25	0.16	0.02	0.20	6.15	4.86	0.01	100.00
	73.15	0.21	13.27	2.62	0.08	0.03	0.20	5.97	4.41	0.05	100.00
	70.28	0.17	13.86	2.99	0.10	0.04	0.05	6.34	6.15	0.01	100.00
	72.80	0.14	12.55	2.79	0.07	0.01	0.22	5.38	6.03	0.01	100.00
ACAF36B	55.51	1.95	18.84	7.02	0.21	2.19	6.06	6.12	1.23	0.87	100.00
Scoria glass	56.09	2.06	13.95	8.57	0.18	2.88	6.13	6.46	2.46	1.22	100.00
	56.79	2.52	15.67	8.96	0.16	1.67	4.17	5.71	3.14	1.21	100.00
	57.00	2.37	14.93	8.96	0.17	2.69	3.88	5.48	3.21	1.30	100.00

Table 3: Major element analyses (wt. %) of feldspar phenocryst traverses in the glass and percentage An, Ab, Or composition.

Sample number	Distance (μm)	SiO ₂	TiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	BaO	SrO	Total	An%	Ab%	Or%
ACAF24	0.00	65.79	0.01	19.03	0.31	0.00	BDL	0.10	7.62	6.04	BDL	0.02	98.91	0.48	65.42	34.10
	19.99	66.17	0.01	18.58	0.32	0.01	BDL	0.10	7.60	6.08	0.00	0.01	98.88	0.46	65.21	34.33
	39.97	66.56	0.01	18.67	0.31	BDL	BDL	0.06	7.62	6.18	0.02	0.01	99.44	0.29	65.02	34.70
	59.96	66.37	0.01	18.98	0.32	BDL	BDL	0.06	7.64	6.26	0.02	0.00	99.65	0.26	64.82	34.92
	79.95	66.34	0.01	18.75	0.32	BDL	BDL	0.06	7.49	6.24	0.01	0.01	99.22	0.30	64.42	35.28
	99.93	66.43	0.01	18.73	0.30	BDL	BDL	0.08	7.61	6.22	0.01	0.00	99.39	0.38	64.81	34.81
	119.93	66.98	0.01	18.95	0.31	BDL	BDL	0.10	7.82	6.01	0.01	0.00	100.19	0.48	66.08	33.44
ACAF32_3	30.00	66.98	0.01	19.19	0.31	0.01	BDL	0.31	9.53	3.43	0.01	0.01	99.77	1.45	79.68	18.86
	60.01	67.12	0.01	18.85	0.31	0.00	BDL	0.15	8.92	4.37	0.00	0.01	99.73	0.69	75.10	24.21
	90.01	67.12	0.01	18.80	0.31	0.01	BDL	0.11	8.26	5.06	0.01	0.02	99.68	0.50	70.92	28.58
	150.02	67.18	0.01	18.77	0.27	0.00	BDL	0.13	8.34	4.99	0.00	0.01	99.70	0.59	71.31	28.09
	180.02	66.79	0.01	19.12	0.30	BDL	BDL	0.17	9.09	4.30	0.01	0.01	99.79	0.79	75.67	23.54
	240.03	66.65	0.01	18.78	0.31	BDL	BDL	0.11	8.99	4.41	0.01	0.01	99.27	0.52	75.19	24.29
	270.03	67.55	0.01	19.24	0.28	0.00	BDL	0.19	8.90	4.27	0.00	0.01	100.45	0.87	75.35	23.78
	300.04	66.74	0.01	18.87	0.27	BDL	BDL	0.23	9.00	4.10	0.00	0.01	99.23	1.06	76.14	22.81
	330.04	67.15	0.01	18.98	0.28	0.00	BDL	0.26	9.22	3.62	0.00	0.01	99.52	1.21	78.51	20.27
	390.05	67.73	0.03	18.44	0.75	0.02	0.00	0.39	9.49	2.72	0.01	0.02	99.59	1.85	82.60	15.55
	420.05	66.84	0.01	19.10	0.30	0.01	BDL	0.25	9.07	3.90	0.01	0.01	99.51	1.18	77.03	21.79
ACAF32_3	0.00	67.98	0.03	18.36	0.75	0.01	BDL	0.51	9.75	2.26	0.00	0.02	99.67	2.42	84.66	12.92
	29.98	67.14	0.01	19.38	0.33	0.00	BDL	0.33	9.43	3.37	0.00	0.01	99.99	1.52	79.74	18.74
	59.93	67.14	0.01	18.99	0.36	0.01	BDL	0.24	9.45	3.28	BDL	0.02	99.49	1.13	80.51	18.36
	89.89	67.24	0.01	19.00	0.32	0.00	BDL	0.24	9.26	3.62	0.00	0.02	99.72	1.14	78.63	20.23
	119.86	67.37	0.01	19.14	0.31	0.01	BDL	0.13	8.81	4.54	0.01	0.00	100.32	0.59	74.23	25.17
	149.83	66.47	0.02	19.01	0.31	0.00	BDL	0.13	8.53	4.66	0.01	0.02	99.16	0.61	73.10	26.29
	179.79	66.63	0.01	18.83	0.31	0.00	BDL	0.18	8.79	4.31	0.00	0.01	99.06	0.84	74.98	24.17
	209.75	66.88	0.01	19.10	0.33	BDL	0.01	0.23	9.21	3.93	0.01	0.01	99.73	1.09	77.24	21.67
	239.72	67.04	0.01	19.19	0.31	0.00	BDL	0.32	9.32	3.37	0.01	0.01	99.58	1.52	79.57	18.91
	269.68	67.63	0.03	18.42	0.62	0.02	0.00	0.47	9.96	2.25	0.00	0.01	99.41	2.20	85.16	12.64

Table 4: Major element analyses (wt. %) of feldspar phenocrysts in the glass and percentage An, Ab, Or composition.

Sample number		SiO ₂	TiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	BaO	SrO	Total	An (%)	Ab (%)	Or (%)
ACAF36B (C)	Feldspar	67.43	0.01	18.89	0.31	BDL	BDL	0.06	7.82	5.76	0.01	0.01	100.30	0.30	67.14	32.56
(C)	phenocrysts	68.15	0.01	19.00	0.36	BDL	BDL	0.09	7.90	5.57	BDL	0.00	101.07	0.42	68.00	31.58
(C)	in obsidian	67.29	0.01	18.97	0.39	BDL	BDL	0.07	7.80	5.79	0.00	0.01	100.33	0.32	66.96	32.72
(C)		67.63	0.01	18.77	0.28	BDL	BDL	0.10	7.73	5.96	0.00	0.01	100.49	0.48	66.03	33.50
(C)		66.38	0.01	18.84	0.29	BDL	BDL	0.12	7.89	5.84	0.01	0.01	99.39	0.57	66.87	32.56
(C)		67.25	0.01	18.91	0.30	BDL	BDL	0.06	7.82	5.94	0.00	0.01	100.29	0.27	66.53	33.20
(C)		67.26	0.01	18.94	0.30	BDL	BDL	0.08	7.83	5.86	0.00	0.01	100.29	0.39	66.75	32.87
(I)		67.78	0.01	18.94	0.28	0.01	BDL	0.11	7.65	5.87	0.00	0.01	100.64	0.52	66.13	33.35
(I)		66.83	0.01	18.90	0.34	BDL	BDL	0.08	8.38	5.28	0.00	0.01	99.83	0.38	70.41	29.20
(I)		66.96	0.01	18.96	0.30	0.00	BDL	0.10	7.84	5.90	0.01	0.01	100.08	0.48	66.58	32.94
(I)		66.86	0.01	19.17	0.27	0.00	BDL	0.08	7.79	5.97	0.01	0.01	100.16	0.39	66.21	33.40
(I)		66.71	0.01	18.81	0.31	BDL	BDL	0.15	7.79	5.89	0.01	0.01	99.67	0.70	66.29	33.01
(I)		66.40	0.01	18.92	0.31	0.00	BDL	0.09	7.93	5.79	0.00	0.02	99.47	0.44	67.25	32.31
(I)		69.77	0.07	16.05	1.24	0.04	BDL	0.23	7.81	4.53	0.01	0.01	99.77	1.17	71.53	27.31
(I)		66.84	0.01	18.71	0.31	BDL	BDL	0.11	7.82	5.98	0.00	0.01	99.78	0.51	66.19	33.30
(R)		68.07	0.01	19.04	0.35	0.01	BDL	0.15	8.77	4.59	0.00	0.02	101.01	0.69	73.88	25.43
(R)		66.80	0.01	18.99	0.32	BDL	BDL	0.21	9.19	3.82	0.00	0.01	99.34	0.97	77.76	21.28
(R)		66.67	0.01	18.91	0.31	0.00	BDL	0.11	7.95	5.57	0.01	0.01	99.54	0.52	68.09	31.39
(R)		67.02	0.01	18.84	0.37	BDL	BDL	0.21	8.86	3.96	0.00	0.01	99.28	1.00	76.52	22.48
(R)		67.41	0.01	19.16	0.34	0.00	BDL	0.13	7.73	5.93	0.01	0.00	100.73	0.62	66.03	33.36
(R)		67.08	0.02	18.17	0.56	0.02	BDL	0.19	8.63	4.33	0.00	0.01	99.02	0.91	74.50	24.60
(R)		66.30	0.01	18.70	0.31	0.00	BDL	0.13	8.03	5.44	0.00	0.01	98.93	0.62	68.75	30.62
ACAF36B (C)	Feldspar	55.23	0.08	28.04	0.51	0.00	0.07	10.82	5.42	0.30	0.03	0.15	100.65	51.56	46.73	1.71
(C)		54.75	0.09	27.85	0.51	BDL	0.07	10.62	5.65	0.29	0.03	0.14	100.00	50.14	48.22	1.64
(C)		56.82	0.08	27.48	0.50	0.00	0.08	10.01	6.09	0.36	0.03	0.15	101.61	46.62	51.38	2.00
(C)		55.33	0.09	28.17	0.50	0.00	0.07	10.75	5.69	0.30	0.02	0.14	101.07	50.19	48.14	1.67
(C)		53.04	0.08	28.53	0.51	0.00	0.08	11.18	5.38	0.27	0.02	0.14	99.25	52.62	45.85	1.52
(C)		53.83	0.08	28.19	0.54	0.00	0.07	10.90	5.50	0.29	0.01	0.14	99.57	51.40	46.95	1.65
(C)		53.77	0.09	27.90	0.56	0.01	0.08	10.62	5.62	0.31	0.03	0.14	99.12	50.22	48.06	1.72
(R)		54.39	0.10	28.01	0.57	0.00	0.07	10.97	5.27	0.29	0.01	0.14	99.83	52.63	45.73	1.64
(R)		54.70	0.09	28.02	0.55	0.01	0.08	11.01	5.58	0.29	0.03	0.16	100.51	51.32	47.06	1.62

Table 4 continued

Sample number		SiO ₂	TiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	BaO	SrO	Total	An (%)	Ab (%)	Or (%)
ACAF36B (R)	Feldspar	55.87	0.13	26.66	0.70	0.01	0.10	9.82	5.98	0.38	0.05	0.18	99.87	46.56	51.29	2.14
	phenocrysts	54.56	0.12	27.23	0.72	0.00	0.11	10.33	5.82	0.34	0.04	0.18	99.45	48.58	49.52	1.90
	in scoria	56.88	0.14	26.59	0.72	0.00	0.10	9.40	6.23	0.42	0.05	0.16	100.69	44.39	53.26	2.35
		54.09	0.12	27.31	0.73	0.00	0.10	10.93	5.54	0.33	0.03	0.16	99.33	51.22	46.96	1.82
ACAF36B	Microlites in	56.57	0.13	27.02	0.69	0.01	0.08	9.71	5.98	0.37	0.03	0.16	100.76	46.30	51.61	2.09
	scoria	57.58	0.21	25.57	0.86	0.02	0.11	8.48	6.53	0.54	0.05	0.15	100.12	40.49	56.45	3.06
ACAF29 (C)	Feldspar	68.53	0.01	18.33	0.43	0.01	0.00	0.05	8.07	5.32	0.01	0.01	100.77	0.25	69.56	30.19
	phenocrysts	67.23	0.01	18.54	0.40	0.00	0.00	0.08	7.76	5.84	0.01	0.01	99.89	26.98	48.82	24.21
	in obsidian	67.11	0.01	18.96	0.37	0.00	0.00	0.11	7.83	5.82	0.00	0.01	100.23	0.53	66.79	32.68
		67.86	0.01	18.70	0.27	0.00	0.00	0.15	8.68	4.69	0.01	0.01	100.39	0.72	73.26	26.02
		68.36	0.02	18.56	0.60	0.01	0.00	0.20	8.11	4.64	0.00	0.01	100.51	0.99	71.91	27.10
		67.55	0.01	18.98	0.29	0.00	0.00	0.10	8.32	5.36	0.01	0.00	100.60	0.44	69.92	29.63
		67.74	0.01	18.76	0.30	-0.01	0.00	0.14	8.38	4.77	0.01	0.01	100.11	0.69	72.27	27.04
		67.55	0.01	18.92	0.30	0.00	0.00	0.13	8.65	4.81	0.00	0.01	100.39	0.59	72.77	26.64
ACAF37 (C)	Feldspar	68.17	0.01	18.72	0.31	0.01	0.00	0.12	7.93	5.75	0.01	0.02	101.04	0.55	67.33	32.12
		67.52	0.01	18.98	0.27	0.00	0.00	0.09	7.66	5.98	BDL	0.01	100.49	0.41	65.81	33.77
		67.11	0.01	18.99	0.30	0.00	0.00	0.10	7.77	5.92	0.02	0.02	100.22	0.48	66.29	33.23
		67.53	0.01	18.90	0.29	0.00	0.00	0.11	7.87	5.76	0.01	0.01	100.49	0.52	67.16	32.32
		66.56	0.01	18.93	0.33	0.00	0.00	0.10	7.94	5.80	0.01	0.00	99.68	0.45	67.22	32.32
		67.04	0.01	18.75	0.31	0.00	0.00	0.13	7.79	5.81	0.00	0.01	99.84	0.60	66.70	32.70
		67.05	0.01	18.66	0.37	0.00	0.00	0.09	7.59	5.86	0.01	0.01	99.66	0.45	66.01	33.54
		66.89	0.01	18.95	0.27	0.00	0.00	0.11	7.82	5.97	0.02	0.01	100.05	0.53	66.19	33.28
		67.60	0.01	19.12	0.35	0.00	0.00	0.08	7.89	6.00	0.00	0.01	101.06	0.36	66.41	33.23
		66.88	0.01	18.95	0.27	0.00	0.00	0.14	7.69	5.88	0.01	0.01	99.85	0.68	66.07	33.25
		67.64	0.01	18.90	0.34	0.00	0.00	0.19	8.35	5.22	-0.01	0.02	100.65	0.87	70.24	28.88
		67.73	0.01	18.99	0.38	0.01	0.00	0.11	7.82	6.03	0.01	0.01	101.10	0.52	66.01	33.47
		67.12	0.01	19.04	0.30	0.00	0.00	0.09	8.14	5.66	0.00	0.01	100.36	0.41	68.34	31.25

Table 4 continued

Sample number		SiO ₂	TiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	BaO	SrO	Total	An (%)	Ab (%)	Or (%)
ACAF37 (R)	Feldspar	66.96	0.01	18.95	0.31	0.00	0.00	0.12	7.89	5.61	0.02	0.01	99.87	0.59	67.73	31.68
(R)	phenocrysts	67.58	0.01	19.46	0.31	0.00	0.00	0.15	8.05	5.55	0.01	0.02	101.15	0.71	68.31	30.98
(R)	in obsidian	67.65	0.01	19.26	0.28	0.00	0.00	0.09	7.89	5.65	0.00	0.01	100.83	0.42	67.70	31.88
(R)		67.39	0.01	18.87	0.32	0.00	0.00	0.10	7.97	5.70	0.00	0.00	100.38	0.49	67.66	31.84
(R)		67.02	0.01	19.11	0.30	0.00	0.00	0.10	7.83	5.77	0.01	0.01	100.16	0.48	67.05	32.47
(R)		67.42	0.01	19.01	0.31	0.00	0.00	0.07	7.84	5.74	0.02	0.01	100.44	0.34	67.28	32.38
(R)		67.91	0.01	18.77	0.33	0.00	0.00	0.12	8.08	5.49	0.01	0.01	100.72	0.54	68.74	30.72
ACAFB (C)	Feldspar	53.72	0.09	28.42	0.57	0.00	0.08	11.24	5.27	0.28	0.02	0.14	99.83	53.24	45.18	1.58
(C)	phenocrysts	53.58	0.08	28.13	0.51	0.01	0.07	11.13	5.29	0.29	0.03	0.15	99.26	52.90	45.46	1.64
(C)	in scoria	54.28	0.09	27.82	0.57	0.01	0.07	11.04	5.39	0.28	0.02	0.14	99.71	52.26	46.15	1.59
(C)		55.01	0.10	27.49	0.59	0.01	0.07	10.31	5.84	0.32	0.02	0.14	99.88	48.50	49.73	1.77
(C)		55.12	0.08	26.97	0.58	0.01	0.06	10.04	5.91	0.37	0.03	0.15	99.32	47.39	50.51	2.10
(C)		54.29	0.08	28.47	0.52	0.01	0.07	11.02	5.28	0.28	0.01	0.14	100.16	52.71	45.71	1.58
(R)		53.58	0.09	27.83	0.65	0.01	0.07	11.05	5.40	0.29	0.03	0.14	99.14	52.18	46.18	1.64
(R)		55.64	0.08	27.75	0.54	0.00	0.08	10.39	5.75	0.32	0.02	0.15	100.72	49.07	49.13	1.80
(R)		54.09	0.11	27.72	0.69	0.01	0.08	10.69	5.67	0.33	0.05	0.17	99.62	50.06	48.08	1.86
(R)		54.81	0.11	26.65	0.71	0.01	0.09	9.90	6.03	0.36	0.04	0.18	98.88	46.62	51.37	2.01
(R)		54.83	0.09	28.09	0.56	0.01	0.07	11.08	5.35	0.30	0.02	0.15	100.55	52.45	45.83	1.72

Table 5: Major element analyses of oxides in scoria and glass.

Sample number		SiO ₂	TiO ₂	Al ₂ O ₃	FeO	MnO	MgO	Cr ₂ O ₃	NiO	ZnO	Total
ACAF36B	Scoria	1.44	17.40	2.51	63.46	0.46	2.51	0.02	0.00	0.04	87.64
ACAF36B		0.20	22.90	1.99	65.62	0.44	1.99	0.02	0.01	0.05	92.10
ACAF36B		1.66	22.98	2.43	65.75	0.59	2.43	0.02	0.00	0.05	94.74
ACAF36B		0.23	22.23	2.42	66.53	0.48	2.42	0.01	0.00	0.07	92.80
ACAF24	Glass	0.06	45.18	0.03	50.87	2.92	0.33	BDL	BDL	0.21	99.60
ACAF24		0.10	47.95	0.03	45.09	2.56	0.14	0.00	0.01	0.13	96.03
ACAF24		0.07	52.00	0.03	42.64	2.44	0.15	BDL	BDL	0.13	97.46
ACAF32_3	Glass	0.11	48.96	0.24	44.06	0.96	0.28	0.01	BDL	0.11	94.71
ACAF32_3		0.05	50.17	0.06	43.91	1.45	0.18	0.01	0.00	0.15	95.98
ACAF32_3		0.08	46.42	0.16	45.77	0.95	0.32	0.01	BDL	0.09	93.80
ACAF32_3		0.07	51.57	0.05	41.91	1.61	0.19	BDL	BDL	0.15	95.54
ACAF32_3		0.55	41.84	0.41	48.61	0.72	0.45	0.01	BDL	0.07	92.64
ACAF32_3		0.07	37.94	0.07	54.93	1.65	0.22	0.02	0.00	0.17	95.07